

Park-Euclid

Boundaries:

The site is located east of downtown Tucson, and is bounded approximately by 8th Street on the north, Mountain Avenue on the east, 14th Street on the south, and Park Avenue on the west. The site includes facilities located at both 299 and 301 South Park, where three companies have conducted laundry and dry cleaning operations since the late 1930s.

Site History:

- During an early 1990 investigation of diesel contamination in the area conducted by ADEQ, a groundwater sample was taken from a well on the Mission Uniform & Linen Service (Mission) property. Analysis of the sample indicated the contamination was a combination of diesel product and volatile organic compounds (VOCs), including tetrachloroethene (PCE), trichloroethene (TCE) and dichloroethene (DCE).
- Mission implemented a phased approach to investigating sources of contamination at the site. Phase I investigations began in March 1992 and included soil gas sampling, groundwater sampling and the abandonment of an inactive water supply well. In 1993, investigative activities focused on the shallow groundwater aquifer and the installation of a short term pilot soil vapor extraction (SVE) system. In 1994, Mission began investigating the regional groundwater aquifer including the examination of potential hydraulic connections between the shallow and regional aquifers. Phase IV investigations focused on the sewer, vadose zone and shallow aquifer investigations, including the installation of an SVE system beneath the facility at 301 South Park. The pilot SVE system operated from June 2000 to August 2003 and removed about 6,000 pounds of PCE.
- The Environmental Protection Agency (EPA) initiated site assessment activities in the area in September 1998 with the installation of two up-gradient shallow groundwater monitor wells. In February 2000, EPA informally delegated responsibility for the site to ADEQ through the remedial investigation/feasibility study stages.
- In April 1999, the site was placed on the WQARF Registry with an eligibility and evaluation score of 51 out of a possible 120.
- In October 1999, ADEQ initiated a remedial investigation. As part of the investigation, ADEQ began sampling two University of Arizona (UA) water supply wells located downgradient from the site. In January 2000, three groundwater monitor wells were installed south of UA's Main Campus to monitor groundwater conditions. Since August 2000, monthly groundwater samples taken from one of these monitor wells have indicated the presence of PCE contamination ranging from 1.3 to 4.7 micrograms per liter ($\mu\text{g/l}$). ADEQ is also sampling active UA drinking water wells monthly. No PCE contamination has been detected in these water supply wells. ADEQ is continuing to sample these monitoring wells and UA's water supply wells on a monthly basis to minimize the risk of drinking contaminated water.

- From November 2000 to February 2001, ADEQ installed 12 groundwater monitor wells to further characterize VOC and diesel contamination in the two aquifers underlying the site. ADEQ installed an additional eight groundwater and three soil vapor monitoring wells from May 2002 to February 2003.

Site Status:

- In July 2004, ADEQ released the draft Remedial Investigation (RI) report summarizing site characterization activities and containing the Land and Water Use Report for public comment; a public meeting was held on September 14 to receive comments on the draft RI report and suggestions for the site Remedial Objectives. ADEQ is currently preparing the draft Remedial Objectives report for public comment and the responsiveness summary for comments received for the draft RI report prior to releasing the final RI report in early 2006.
- In 2004, Mission Linen expanded the pilot SVE system and continued the remediation of the shallow soils underneath the facility. An additional 420 pounds of PCE were removed from the shallow soils. Mission Linen is currently expanding the multi-phase extraction system to remediate the diesel free product containing PCE that overlies the perched aquifer.

Site Hydrogeology:

- The site is located within the Tucson Basin, a northwest trending alluvial valley covering an area of about 750 square miles in the Santa Cruz River drainage basin of southeastern Arizona.
- The subsurface materials underlying the site are predominately fine to coarse-grained sands and silts, interbedded clay and gravel-sized sediments. A clay aquitard of variable thickness occurs at around 100 feet below ground surface (bgs), underlying the perched aquifer.
- Depth to the perched aquifer is about 90 feet bgs; the regional aquifer is about 200 feet bgs. The current flow direction in the regional aquifer is to the north/northeast.

Contaminants:

The current contaminants of concern in groundwater include diesel free product and volatile organic compounds (VOCs), including tetrachloroethene (PCE), trichloroethene (TCE) and cis-1,2 dichloroethene (cis-1,2-DCE). PCE, TCE, and 1,2-DCE are present in concentrations above Aquifer Water Quality Standards (AWQS). Contaminants of concern at the site may change as new data become available.

Public Health Impact:

A preliminary risk assessment was completed by the Arizona Department of Health Services (ADHS) in March 1995. There are no significant health risks associated with the site at this time.

ADEQ conducted soil gas flux testing and sampling in February 2004 of soils overlying the contaminant plume in the perched aquifer to assess potential risks to human health due to vapor

intrusion into overlying businesses and residences. Results of a screening health risk assessment indicated VOCs volatilizing from subsurface soils and groundwater did not pose a significant risk to current or future off-site residential structures; but could pose a significant risk to workers at the Mission Linen facility. Based on this risk assessment, Mission Linen performed ambient air quality sampling inside the Mission Linen facility that indicated vapor concentrations inside the building were significantly below applicable occupational health exposure limits.

The University of Arizona (UA) operates three active production wells downgradient from the regional aquifer contaminant plume. ADEQ samples these UA wells on a monthly basis to ensure these wells have not been impacted by contamination from the site. No PCE contamination has been detected in these water supply wells.

Community Involvement Activities:

A community advisory board was formed for the site in March 2000 and meets on a regular basis. These meetings are open to the public. The CAB meeting agendas and minutes can be viewed at <http://azdeq.gov/environ/waste/sps/meeting.html>

Information Repositories:

Interested parties can review site information at the information repository at the Main Library, Third Floor, located at 101 North Stone Avenue in Tucson, (520) 791-4393. Site information is also available at both ADEQ's Southern Regional Office located at 400 W. Congress, Suite 433 in Tucson, and the main office located at 1110 W. Washington Street in Phoenix. Files are available for review Monday through Friday from 8:00 a.m. to 5:00 p.m. Please call (520) 628-6715 to arrange a file review appointment at the Southern Regional Office. To arrange for a time to review the site file at the main ADEQ office, please call the ADEQ Records Center (602) 771-4378 or (800) 234-5677 (Arizona toll-free).

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* In Arizona, but outside the Tucson area, call toll free (888) 271-9302.